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IMPORTANT STEPS IN GROWING GRAIN SORGHUMS

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(1) Terrace the land if it is subject to washing, or in west Texas if there is any water run-off.

(2) In northwest Texas, prepare the land by deep listing or flat breaking in the spring. Preparing the land in the spring in that section will give as good yields as when listed or plowed early. In other sections, prepare the land similar to that of corn.

(3) It is suggested that the crop be fertilized in the sandy sections, except in west Texas, similarly to corn, by applying from 150 to 200 lbs., of a mixture having approximately a 1-3-1 ratio, such as 4-10-2 or 4-12-4. A side dressing of 100 pounds of a high grade nitrogen fertilizer may also be made.

(4) Plant only well bred pure line seed which was bred by the Agricultural Experiment Station or by breeders. At the Lubbock Experiment Station Dwarf yellow milo, Spur Feterita and Texas Blackhul Kafir, gave the highest yield and at the Beeville Station, Texas Blackhul Kafir and Hegari have been the best yielders.

(5) Do not plant grain sorghum seed too early. In northwest Texas, the best dates are from May 15th to June 15th. If planted earlier, the plants will head out during the dry summer period and will result in a low yield. Kafir may be planted somewhat earlier than the other grain sorghums. Hegari should never be planted until the ground has become thoroughly warmed up. At the Beeville Station, in south Texas, Kafir gave the best results when planted from March 10th to April 20th and Hegari when planted in May.

(6) The seed should always be treated if any kernel smut is present. Even if there is no smut, it usually pays to treat the seed on account of getting a better germination. Especially is this true of such sensitive seed as hegari and feterita, which do not germinate well unless moisture and soil temperature conditions are favorable.

(7) The treatment consists of placing the seed in a tight container such as a barrel, churn, or box, arranged so that it can be revolved on an axis, sprinkling two to three ounces of powdered copper carbonate on the seed and then revolving the container so that every seed receives a coating of the powder.

(8) Do not plant too thick. At the Lubbock Station, the best yield of Kafir has been obtained by spacing the plants from 3 to 6 inches apart, in 3 to 4 ft. rows and for Milo Maize by spacing the plants from 24 to 36 inches apart. The difference in spacing is due to the ability of Milo to produce suckers, and thereby adapt itself to conditions of moisture. Grain sorghums should be planted either in normal 3 to 4 ft. rows or in paired rows, but not in 6 ft. rows, since the wide rows give considerably smaller average yields.

(9) Do not cultivate deeper than 2 to 3 inches, after the first cultivation, because yields are often greatly reduced by cutting important feeder roots when cultivating too deeply. Experiments have proved that the main object of cultivation is to keep down weeds.

(10) If any off-type or hybrid stalks appear in the field, they should be pulled up to prevent any crossing with pollen from the hybrids.

(11) If pure line pedigree seed has been planted, select a sufficient amount of seed from vigorous stalks, producing plump and well matured seed for planting the following season.

(12) Thresh the planting seed by hand on a washboard to prevent the seed from cracking, or with a hand-thresher, and store in a dry place away from rats. If necessary, fumigate with highlife in a tight bin for 24 hours at the rate of ½lb. for every 100 cubic feet of space, and then thoroughly ventilate so as not to injure the germination. Keep fire away from highlife, as it is very inflamable.

(13) Harvest the crop as soon as it is ready, as otherwise it may be seriously damaged by being exposed to the weather and birds.

(14) The crop may be harvested for grain either by hand, or with a header attachment on a wagon, or with a combine. For forage, the bundles should be harvested with a row-binder. Milo Maize is harvested almost altogether for the grain only, on account of its dry stalk, whereas the other grain sorghums are harvested a great deal for forage as well as grain.